

Natural Heritage & Endangered Species Division of Fisheries & Wildlife Route 135 Westborough, MA 01581 (508)792-7270, ext. 200

MASSACHUSETTS RARE AND ENDANGERED PLANTS

HEARTLEAF TWAYBLADE (Listera cordata L.)

DESCRIPTION

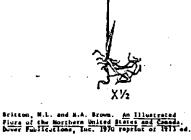
Listera cordata is a very slender, perenniel orchid with two (or sometimes four) opposite, heart-shaped leaves, 1/2 to 1" (1 to 3cm.) long, which appear halfway up the single green stem. The flowers, which are arranged as a raceme, stand much higher than the leaves, the entire height of the plant being 4 to 8" (10-20 cm.). The flowers are small, 1/8" (.3cm) across, light green to dusky purple, and have one slightly longer, linear, cleft petal called the lip. The flowers appear from late May to early July, which is the best time to identify this orchid. The name, "twayblade," means "twoleaved," as the plant usually only has two leaves on each stem.

SIMILAR SPECIES IN MASSACHUSETTS

White Adder's Mouth (Malaxis brachypoda) and Green Adder's Mouth (M. unifolia) are similar, tiny orchids of coniferous swamps and forested fens, but they differ from Heartleaf Twayblade primarily in having only a single leaf.

HABITAT IN MASSACHUSETTS

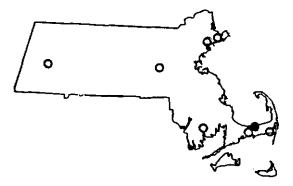
Listera cordata occurs in wet, mossy, coniferous woods. The only Massachusetts site is an acidic swamp of Atlantic White Cedar (Chamaecyparis thyiodes) with Inkberry (Ilex glabra), Sedges (Carex spp.), Cinnamon Fern (Osmunda cinnamomea), Round-leaved Sundew (Drosera rotundifolia), and Sphagnum. This species is often associated with clear patches of Sphagnum and mossy hummocks.



(continued overleaf)



Range of Listera cordata



Verified since 1978 OReported prior to 1978

Distribution in Massachusetts by Town

HEARTLEAF TWAYBLADE (continued)

RANGE

<u>Listera cordata</u> is found from Greenland to Alaska, south to Massachusetts and Michigan, and scattered down the Appalachians to North Carolina. It is found in cool, moist, mossy environments throughout.

POPULATION STATUS IN MASSACHUSETTS

There is only one verified current site of Heartleaf Twayblade in Massachusetts, though there are eight historical records. It is considered "Endangered" in Massachusetts. It is on the edge of its range here, and it exhibits a scattering of populations, though suitable habitat appears to be relatively common. This is typical of many plant species at the edge of their range.